NOW WITH MORE BATTERY, LESS WEIGHT!

LifeChoice

Activox™

breaking boundaries

PORTABLE OXYGEN CONCENTRATOR

Operator's Manual

FOR USE WITH MODELS:
XYC100B-SPT & XYC100B-PRO

Manufactured & Distributed by **Inova**Labs

InovaLabs

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INTRODUCTION

The Operator's Manual will provide familiarity with all models of the LifeChoice Activox Portable Oxygen Concentrator (POC) and its accessories. Be sure to read all of the enclosed information in its entirety before using the LifeChoice Activox POC. The POC is an internally powered, Type BF device when powered by the Internal Battery and a Class II, Type BF device when connected to the external AC Adapter/Charger, DC Adapter/Charger, or rechargeable External Battery. The essential performance of the POC is to provide oxygen at a volume that remains within tolerance (the tolerance was defined based on technical judgment from within the manufacturer's expertise in this specific medical application). In addition, the device's ability to detect certain error conditions (such as low concentration or no breath) and create an alarm is also considered a part of essential performance.

APPLICATION/INDICATIONS FOR USE

This manual applies to the LifeChoice Activox POC REF XYC100B-SPT and XYC100B-PRO.

INDICATIONS FOR USE: The LifeChoice Activox Oxygen Concentrator is used on a prescriptive basis by patients who are diagnosed as requiring supplemental oxygen. This oxygen concentrator will provide supplemental, high concentration oxygen to these patients. It is not life-supporting nor life-sustaining. It may be used continuously in a home, institution or travel environment. The LifeChoice Activox is also portable.

This device should be used only when prescribed by a physician.

SYMBOL DESCRIPTIONS

Symbol	Description	Symbol	Description	Symbol	Description
	Caution		Consult instructions for use		No smoking
	No open flame		No oil or grease		Do not disassemble
	Temperature limit		Humidity limitation		Keep dry
	This side up		Fragile, handle with care		Compliant with WEEE
	Manufacturer		Date of manufacture		Class II equipment
	Type BF applied part Device that has conductive contact with patient		Catalogue number		CE Marking of Conformity Representative
	Gas flow		Prescription only		Radio frequency
	Rechargeable battery	POC	Portable Oxygen Concentrator Connection		Authorized representative in the European Community
	Serial number				

WARNINGS

1. U.S. Federal law restricts this device to sale by or on the order of a physician.
2. It is the responsibility of the patient and/or provider to make back-up arrangements for an alternative oxygen supply.
3. Availability of an alternate source of oxygen is required in case of power outage or mechanical failure.
4. The device is designed to be used in the provided approved carry case.
5. The device should be located as to avoid pollutants or flames.
6. Portable and mobile RF communications equipment can affect medical electrical equipment.
7. The device should not be used adjacent to or stacked with other equipment.
8. When traveling by air, the device and External Battery must be transported as carry-on (not checked) baggage.
9. The device and external battery pack contain lithium-ion batteries that are subject to special shipping regulations. If shipping either the device or battery pack, notify the shipper that the shipment will contain lithium-ion batteries.
10. In the event of a external battery's cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.

CONTRAINDICATIONS

1. The device is not intended to be life-sustaining or life-supporting.
2. In certain circumstances, oxygen therapy can be hazardous. Please seek medical advice before using this device.
3. The device is designed to provide a flow of high purity oxygen up to 3 LPMeq pulse. The device should only be used by patients prescribed oxygen therapy within this range.
4. As the device will alarm through audio and visual indicators, patients who are unable to communicate discomfort, hear, see and/or understand the alarms may require additional monitoring.

ADVERSE EVENTS/HAZARDS

Inova Labs Inc. assumes no liability for persons choosing not to adhere to manufacturer's recommendations. Failure to adhere to the statements below may impair performance of the device and will void all warranties.

1. DO NOT use oil, grease or petroleum-based products on or near the device as the use of such products may damage the electronic components of the device and will void all warranties.
2. DO NOT use power supplies or accessories other than those that came with the device as the use of non-specified accessories may impair performance and void all warranties.

3. DO NOT allow smoking or open flames within 10 ft. (3 m) of the device as the device produces enriched oxygen gas which accelerates combustion.
4. DO NOT operate the device in the accessory bag or any other enclosed bag as improper ventilation will impair performance and void all warranties.

5. DO NOT submerge or expose the device to liquids as it may damage the electronic components of the device and will void all warranties.

6. DO NOT operate or expose the device to temperatures and humidity levels outside of the specified operational environment conditions listed in the Specifications section on page 20. Extreme temperatures and humidity levels may damage the device and void all warranties.
7. DO NOT press the control panel buttons with any hard, sharp and/or small object as it may damage the control and will void all warranties.

STANDARD PACKAGE CONTENTS

1. **LifeChoice Activox POC**
2. **4-Way Carry Case**
   Use as a backpack, shoulder strap, waist pack or briefcase
3. **Adjustable Straps**
   For use with 4-Way Carry Case
4. **External Battery***
5. **AC Power Adapter**
6. **DC Power Adapter**
7. **Standard 7-Foot (2-meter) Long Single Lumen Nasal Cannula†**
8. **Accessory Bag**

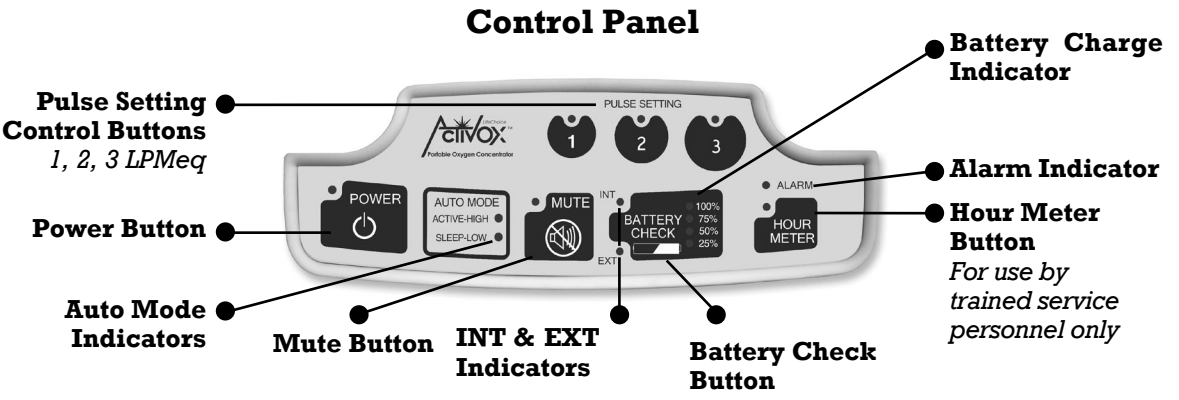
Model identified on unit and packaging labels. See REF.

*An optional External Battery is available for purchase which provides up to 3 hours of additional battery time. (Reference Battery Life table as battery life will vary depending upon model, breath rate and Pulse Setting.)

†Nasal cannula may not be included. Based on international requirements.

USER CONTROLS

Control Panel



Indicator Lights: Colored LED lights indicate either a change in operating status or a condition that may need response (alarm).

Audible Signals: An audible signal (beep) indicates either a change in operating status or a condition that may need response (alarm). Audio response will vary among users depending upon hearing abilities.

Pulse Setting Control Buttons: There are three individual Pulse Setting Control Buttons on the Control Panel: 1, 2, and 3 which reference oxygen flow. Use the setting prescribed by your doctor.

Power Button: To turn the LifeChoice Activox POC on or off, press the Power Button.

Auto Mode Indicators: There are two inhalation sensitivity modes on the control panel: Active-High and Sleep-Low, which automatically adjust based on oxygen demand (e.g. breathing patterns) requirements. (Reference Control Panel diagram.)

Mute Button: The POC features a mute function to disable audible alarms during operation. If an alarm has been muted, the amber Mute Button LED will be illuminated. (Reference Control Panel diagram.)

CAUTION: Please use this function appropriately as it silences important audio signals regarding the status of the POC.

INT and EXT Indicators: These LED lights will indicate which power source the unit is using or charging. The INT LED represents the Internal Battery, while the EXT LED represents the External Battery.

Battery Check Button: Displays the battery charge level of the internal, and if connected, external battery.

Battery Charge Indicator: The Battery Charge Indicator consists of four LEDs labeled "25%", "50%", "75%", and "100%".

Battery Check LED				Charge Level
25% LED	50% LED	75% LED	100% LED	
Off	Off	Off	Off	0%*
Blinking	Off	Off	Off	1% -12%*
On	Off	Off	Off	13% - 25%
On	Blinking	Off	Off	26% - 37%
On	On	Off	Off	38% - 50%
On	On	Blinking	Off	51% - 62%
On	On	On	Off	63% - 75%
On	On	On	Blinking	76% - 95%
On	On	On	On	96% - 100%

NOTE: Charge level indication is approximate. The charge indicator will show 4 solid green lights when the battery has a charge level of 96 percent or more. When the battery reaches a full 100 percent charge, the INT or EXT (if connected) LEDs will turn off.

Hour Meter Button: The POC will read and display the number of hours that the unit has been used. (Refer to Routine Maintenance section.)

Nasal Cannula: A standard single lumen nasal cannula or equivalent must be used with the POC to provide oxygen from the concentrator. A standard single lumen cannula, 7-foot (2-meter), is recommended for use.† For a replacement cannula, please contact your local medical equipment supplier. Follow cleaning and care instructions provided with the nasal cannula.

CAUTION: Use of some administration accessories not specified for use with this oxygen concentrator may impair the performance.

* Reference Alarm Indicators Table for explanation of low battery alarms.
† Nasal cannula may not be included. Based on international requirements.

PART NAMES

Cannula Nozzle Fitting: The Nasal Cannula connects to the oxygen output nozzle at the top of the POC. DO NOT place the cannula into nasal passages until the POC is fully powered on. Breathing through the Cannula during start-up may prevent the system from powering on.

Control Panel: All user controls are located on this panel. See User Controls section on page 6 for details.

Fan Inlet Vent: Cooling air is drawn in through this opening. (See Maintenance section for cleaning instructions.)

Fan Outlet Vent: Processed air is exhausted through this opening.

External Battery Port: Connect the External Battery, if purchased, to this port. (This connection is to be used solely with the specified external battery.) Precaution: Please pay attention to the orientation of the connector. Wrong alignment could cause damage to the connector.

FAA Approval Sticker: Located on the bottom of the unit.

OPERATING INSTRUCTIONS

The LifeChoice Activox POC is recommended and designed to be operated and stored in its carry case at all times. To configure the carry case as a backpack, please reference the Carry Case Configuration Instructions.

FOLLOW THESE STEPS BEFORE FIRST USE:

1. Charge the POC before initial use. The Pro Model can take up to 4.5 hours to fully charge and the Sport Model can take up to 3 hours. Begin charging by connecting the AC Adapter to the unit and charger end to an electrical outlet.
2. Verify that the Battery Check LED labeled "INT" is solid green and the Power LED is flashing green. This indicates that the system recognizes the external power source and is charging the Internal Battery.

   If an external battery was purchased, connect it to the External Battery Port. By design, the External Battery will begin charging after the Internal Battery has reached a full charge. It can take up to 3 hours to fully charge the External Battery.

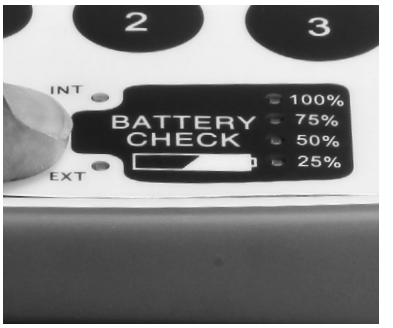
⚠ **CAUTION:** Never use an external battery that is not authorized by Inova Labs Inc. DO NOT dismantle, open or shred secondary cells or batteries. DO NOT expose cells or batteries to heat or fire. Avoid storage in direct sunlight.

3. Connect the nasal cannula securely to the POC cannula nozzle fitting.

POWERING THE LIFECHOICE ACTIVOX POC

The POC can be powered in four different ways: (1) Internal Battery, (2) AC Adapter/Charger, (3) DC Adapter/Charger, (4) External Battery (optional, sold separately from the Standard Package). The rechargeable batteries are maintenance-free and can only be purchased at the factory or through an authorized repair facility.

1. **Internal Battery:** A rechargeable internal battery is located within each POC unit. (Reference Battery Life Timetable as battery life will vary depending upon model, breath rate and Pulse Setting.)

   When the POC is being powered from the Internal Battery, the Battery Check LED labeled "INT will slowly flash. Pushing the Battery Check Button will display the charge level of the Internal Battery.

   If not connected to the AC or DC Adapter/Charger, the Internal Battery will slowly discharge over time even when not in use. Always check the battery level prior to use to ensure adequate charge level.

2. **AC Adapter/Charger:** An AC Adapter/Charger allows the POC to be powered from a standard 100-240 VAC, 50/60 Hz outlet. When the unit is operated from an AC Adapter/Charger, power from the AC outlet powers the unit and recharges the internal and/or External Battery. (See Battery Charging section for details.)

Using an AC Adapter/Charger that is not specified by Inova Labs with the POC may damage the unit and will void all warranties.

3. **DC Adapter/Charger:** A DC Adapter/Charger can be connected from the POC unit to a vehicle's (car, boat, motor home, etc.) standard 12 VDC outlet. When the system is connected to the DC outlet, power from the vehicle battery powers the POC unit and recharges the Internal and/or External Battery. (See Battery Charging section for details.)

NOTE: The 12 VDC outlets in some pre-2000 model cars will not provide sufficient current to operate the POC and charge the battery at the same time. Verify that a DC outlet can provide at least 10 amps at 12 VDC. Car auxiliary power varies significantly; therefore, the rate of charging will vary. It is recommended that the vehicle be turned on before plugging the DC Adapter/Charger into the POC.

4. **External Battery:** To power the POC from an external battery, connect the External Battery to the External Battery Port. A fully charged external battery will supply power to the POC for up to three hours. (Reference Battery Life Timetable as battery life will vary depending upon model, breath rate and Pulse Setting.)

When the POC is being powered from the External Battery, the Battery Check LED labeled "EXT" will be slowly flashing. Pushing the Battery Check Button will display the charge level of the External Battery.

INTERNAL BATTERY CHARGING

1. Connect the unit to either an AC or DC Adapter and corresponding charger to a suitable outlet.

2. With the unit powered off, verify that the INT Battery Check LED is solid green and the Power LED is flashing green. This indicates that an external power source is recognized and the battery is charging.

3. It can take a fully discharged Internal Battery up to 4.5 hours with the Pro Model or 3 hours with the Sport Model to reach a 100 percent charge level. Press the Battery Check button to check the charging process.

4. When the Internal Battery is fully charged, the INT Battery Check LED will turn off.

   NOTE: The charge indicator will show 4 solid green lights when the battery has a charge level of 96 percent or more. When the battery reaches a full 100 percent charge, the INT LED will turn off.

5. It is recommended to recharge the Internal Battery, even if only partially depleted as often as possible. The Internal Battery cannot be overcharged, so it is okay to leave it plugged in via an AC or DC Adapter/Charger continuously.

EXTERNAL BATTERY CHARGING

1. Connect the External Battery to the External Battery Port on the POC. Then connect the unit to either an AC or DC Adapter and corresponding charger to a suitable outlet. To prolong battery life and maintain communication with the POC, it is recommended to charge the External Battery when you charge the POC's Internal Battery.

2. Verify that the Battery Check LED labeled "EXT" is solid green and the Power LED is flashing green. This indicates that an external power source is recognized and the battery is charging.

   NOTE: By design, the Internal Battery will charge first. That means that the External Battery will not start charging until the Internal Battery reaches a 100 percent charge level. Use the INT and EXT Battery Check LEDs to determine which batteries are charging.

3. It takes up to 3 hours for a fully discharged External Battery to reach a 100 percent charge level when plugged into the unit and an AC or DC Adapter/Charger. Press the Battery Check button to check the charging progress.

   NOTE: By design, the External Battery will power the POC when plugged in. Once the External Battery depletes, the unit will switch to internal battery power. If both the Internal and External batteries are fully discharged, it can take up to 7.5 hours to achieve a 100 percent charge level in both batteries.

4. When the External Battery is fully charged, the EXT Battery Check LED will turn off.

   NOTE: The charge indicator will show 4 solid green lights when the battery has a charge level of 96 percent or more. When the battery reaches a full 100 percent charge, the EXT LED will turn off.

In the event the power supply is interrupted to the POC when the AC or DC Adapter/Charger is connected, a two-second audible alarm will sound and the compressors will transition from external to internal power. During this transition, you may hear the compressors momentarily pause. No action is required as the system will automatically transition to internal power and resume operation.

NOTE: If the POC is powered off and either the AC or DC Adapter/Charger is connected and charging is complete, the internal fans may continue to operate for an additional period of time until the temperature inside the unit is sufficiently cooled.

REPRESSURIZATION

If the unit has not been used for a period of one or more days, it will automatically re-pressurize itself. During this time, you may hear the compressors running for a few seconds.

BATTERY LIFE TIMETABLE

Battery Type		Pulse Setting		
		1 LPMeq	2 LPMeq	3 LPMeq
Internal Battery*	Sport Model	5.5 Hours	4 Hours	3.25 Hours
	Pro Model	12.5 Hours	7.25 Hours	6.25 Hours
External Battery*	All Models	3 Hours	3 Hours	2 Hours

* Based on breaths per minute.

CARRY CASE CONFIGURATION INSTRUCTIONS

BACKPACK

1. Adjust each strap to make sure they are the same length.
2. Unfold the snaps that are tucked into the mesh pocket on the backside of the Carry Case.
3. Attach one strap to the top left and bottom right snaps on the Carry Case making sure the shoulder pad is near the top clip.
4. Attach the second strap to the top right and bottom left snaps on the Carry Case making sure the shoulder strap is near the top clip.
5. Form an "X" with the straps at the top and slide arms into the configuration as if putting on a backpack. Assistance may be required with this step.
6. Adjust straps as needed. Assistance may be required with this step.

FLYING WITH YOUR POC

The LifeChoice Activox POC is approved by the FAA for use on commercial aircraft. This approval is listed as a part of the labeling on the bottom panel of the unit. Follow the instructions outlined below before traveling with the POC.

1. Fully charge the Internal and, if purchased, External battery within 24 hours of a trip.
2. Pack all required accessories (AC and DC Adapter/Charger, Operator's Manual, etc.)
3. Download and complete the "Physician Statement" from InovaLabs com/Resources. Bring the signed and completed Physician Statement to the airport and be ready to provide it to the airline if requested.

The POC is FAA-approved for air travel. The required FAA label location is on the bottom of the POC. The FAA-approved POC list shows *Inova Labs LifeChoice Activox*. Every airline has specific information required for traveling with oxygen. Before traveling, review your airline's specific requirements.

Authorized by FAA for use onboard aircraft 14CFR Part 121. SFAR 106
REF XYC100B LifeChoice Activox
SN
WORK ORDER
Portable Oxygen Concentrator O2: 90% ± 3% (1-3 LPMeq)

NOTE: Airlines may have specific requirements for traveling with oxygen. Before traveling, notify your airline that you will be traveling with an approved POC.

OPERATING PROCEDURE

1. Locate and position the POC so that the Fan Inlet Vent and Fan Outlet Vent are not obstructed. The unit, particularly the air inlet slots and the air outlet areas, should be positioned in a well-ventilated space.

2. Power the POC using one of the four modes described in the Powering the LifeChoice Activox POC section.

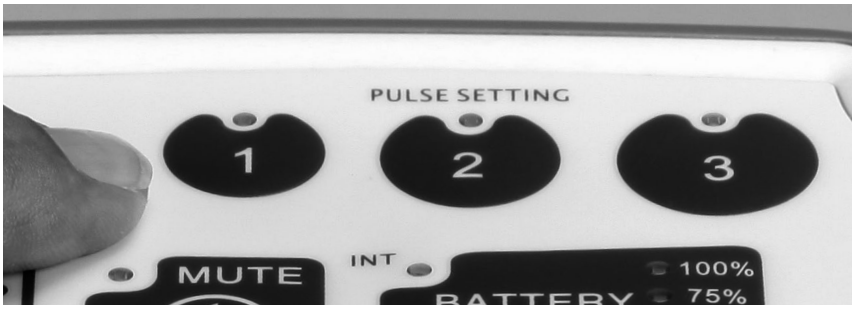
3. Press the Power Button once to turn the unit on. An audible beep will sound and the Power LED, the Auto Mode Active-High LED and the Pulse Setting of 1 LED will flash green. This indicates that the POC is powered on, ready for use, and the settings may now be changed. Pressing the Power Button for an extended time after the audible beep will cause the system to turn off.

NOTE: After powering on the POC, allow 3 minutes for the unit to reach stated performance. After initial power on, the Pulse Setting LED corresponding to the last flow rate used will illuminate.

⚠ **CAUTION:** DO NOT place the cannula into nasal passages until the POC has fully powered on. Breathing through the cannula during start-up may prevent the system from powering on.

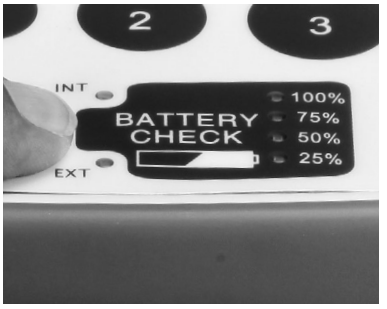
4. There are 2 inhalation sensitivity modes on the control panel: Active-High and Sleep-Low which automatically adjust based on oxygen demand (e.g. breathing pattern) requirements. No action is required to start the delivery of oxygen.

5. Select a Pulse Setting of 1, 2, or 3 as prescribed by your doctor. The device utilizes PULSE-WAVE™ Delivery which delivers oxygen congruent with your inhalation rate. Because this type of delivery is very gentle, you may not feel the pulse of oxygen. To verify that oxygen is being delivered, reference the LED above your selected Pulse Setting. This LED will flash every time a breath is detected and a bolus of oxygen is delivered.



6. Place the nasal cannula in the nasal passages and breathe normally. When the POC senses inhalation, oxygen is supplied through the cannula. The duration and size of the pulse is dependent upon the Pulse Setting selected.

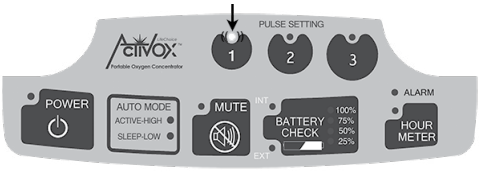
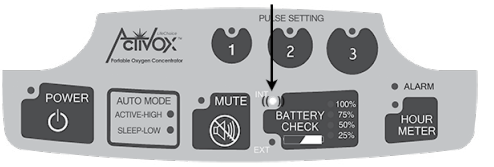
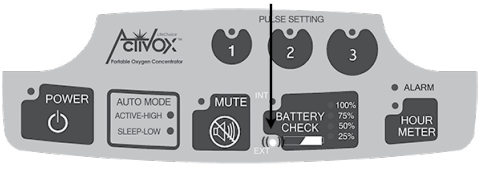
7. Check to make sure your unit's battery is fully charged before venturing out with the POC for the first time. (See Battery Charge Indicator section, User Controls).



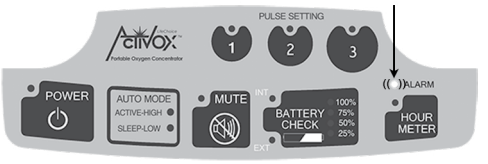
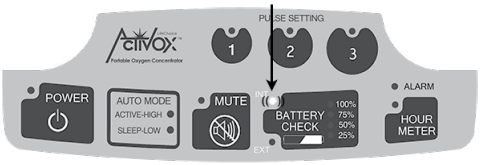
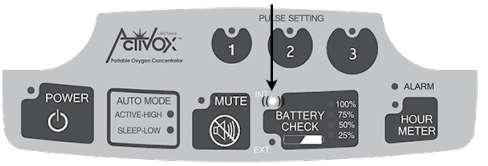
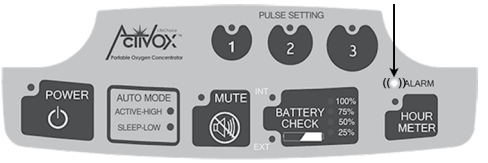
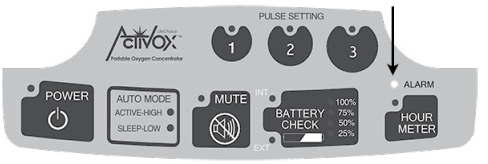
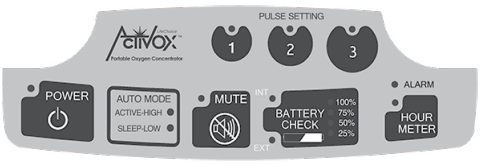
8. To turn the POC off, press the Power Button and hold for 2 seconds until the green Power LED goes off and the unit shuts down. After the POC is powered off, the internal fans may continue to operate for an additional period of time until the temperature inside the unit is sufficiently cooled.

LIGHT INDICATORS/ALARMS

NORMAL OPERATION INDICATORS

Normal Operation	Audible Alert	Light Indication	Action
POC turned on	Brief audible tone	Green LEDs of *Power*, *Active-High* and *Pulse Setting 1* are illuminated. **NOTE:** After the initial power on, the Pulse Setting LED corresponding to the last flow rate used will illuminate	You may begin to use the POC unit in 3 minutes
POC has detected an inhalation/ breath and is delivering a pulse of oxygen	None	 Green LED of selected *Pulse Setting* flashes with each breath	POC is functioning normally.
POC powered by internal battery	None	 Green LED light labeled *INT* flashes slowly	POC is functioning normally.
POC powered by external battery	None	 Green LED light labeled *EXT* flashes slowly	POC is functioning normally.

ALARM INDICATORS

Problem	Audible Alert	Light Indication	Action
No breath detected by the unit for approximately 75 seconds	Intermittent beep	 Amber *Alarm* LED light flashes	Check cannula connection. Breathe through nose and alarm will shut off. If alarm persists, contact your provider.
Low Battery Alarm *(Approximately 10 minutes of battery power)*	Single loud, long beep every 60 seconds	 Amber *Battery Check* LED labeled *INT* flashes slowly	Connect the POC to an external power source.
Critical Low Battery Alarm *(Approximately 30 seconds of battery power)*	Fast audible beep *(Unit shuts down)*	 Amber *Battery Check* LED labeled *INT* begins flashing quickly	Connect the POC to an external power source.
Critical High Temperature Alarm *(Unit is overheating*	Fast audible beep *(Unit shuts down)*	 Amber *Alarm* LED light flashes until unit cools	Change to another source of oxygen while allowing the unit to cool.
Low Oxygen/ Service Alarm	Continuous audible alarm	 *Alarm* LED is solid Amber	Turn off the unit. Change to another source of oxygen and contact your equipment provider.
AC Power Interruption	Single audible beep for 2 seconds	 All LEDs off	Switch to another source of oxygen. Check the power supply. If an issue is found, solve as appropriate. If no issue was found, contact your provider.

ROUTINE CLEANING AND MAINTENANCE

The LifeChoice Activox POC was designed to minimize the amount of routine maintenance that is required. The device does not have any end-user repairable parts. Aside from the preventative maintenance outlined below, all other maintenance required must be performed by qualified personnel.

Fan Inlet Vent Cleaning: There is one inlet vent located on the right side (facing the unit) of the POC. The carrying case for the unit has mesh material corresponding to the location of the Fan Inlet Vent. You should visually check the carrying case to ensure that there is no buildup of lint, hair or other materials that could obstruct the flow of air into the unit's fan inlet vent. Remove any material buildup using a soft brush.

At least once a month inspect the grille of the intake vent and if it appears dirty, use a dry cotton swab (Q-Tip or similar) to clean it. Never use alcohol, solvents, or petroleum distillates for cleaning.

Unit and Carrying Case Cleaning: If it is necessary to clean the unit and/or carrying case, use only warm water and a mild liquid dish detergent. Dampen a cloth in the solution and carefully wipe the outside surfaces of the unit and/or carrying case.

⚠ **CAUTION:** DO NOT use alcohol, solvents, polishes or any oily substances since they may be flammable.

Nasal Cannula Inspection: At least once a week, visually inspect the nasal cannula. Make sure there are no kinks or obstructions. Replace as needed with a standard 7 ft. (2 m) single lumen nasal cannula from your local medical equipment supplier.

Reserve Oxygen Supply: Your equipment provider should provide or suggest an alternative source of supplemental oxygen therapy in case there is a mechanical failure or power outage.

Hour Meter: The Hour Meter function is for use by trained service personnel only.

SERVICE LIFE

This section outlines the defined service life of the LifeChoice Activox POC's components. The service life of these components is dependent on operating and environmental conditions. Daily use of the unit may actually extend the replacement time for some of these items. It is recommended that the device be powered on and run for a few hours, if it is has not been used on a daily basis.

Should your device indicate an alarm that requires you to contact your equipment provider, the provider may determine the device must be sent in for service. The corresponding alarm triggered by an internal component at the end of its service life is listed below.

Component	Alarm Triggered
Sieve Bed	Low Oxygen or Service Alarm
Compressor	Low Oxygen, Low Pressure or Service Alarm

Should your device alarm for service (see Alarm Table on page 17), switch to another source of oxygen and contact your equipment provider.

TECHNICAL SUPPORT

Please contact the local medical equipment company that provided or sold you the POC for any technical or emergency support.

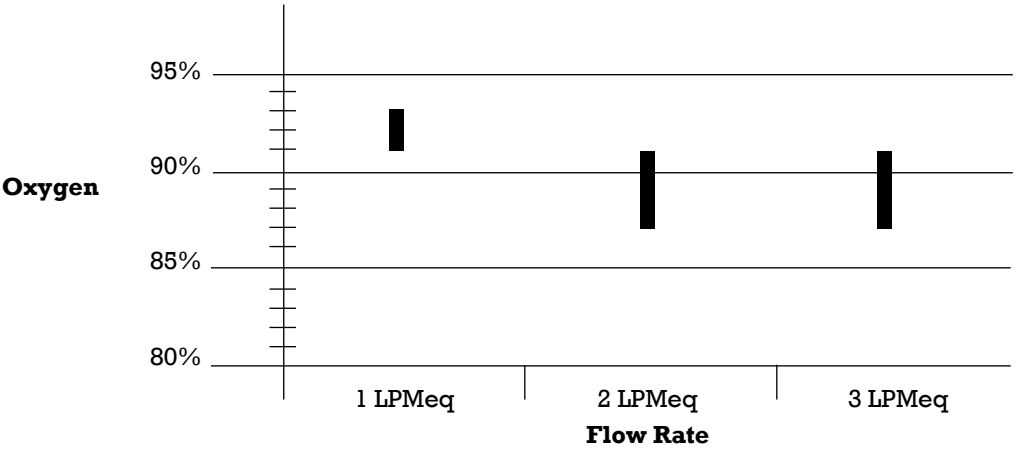
If any additional information is needed, please contact Inova Labs' Customer Care Team toll-free at 1.800.220.0977 or 1.512.617.1700.

DISPOSAL

Inova Labs expects end users to dispose of the POC in an environmentally friendly way and in accordance with local laws and regulations. Electrical and electronic equipment is labeled with the crossed-out wheeled bin symbol indicating that the equipment should be disposed of by the end user separate from other types of waste. The POC device contains lithium-ion batteries, and end users should contact Inova Labs or their local distributor for disposal, collection and recycling options and terms and conditions for their country. In 2002, the European Union introduced the Directive on Waste Electrical and Electronic Equipment (WEEE). The main aim of the Directive is to ensure that WEEE is collected and treated separately. WEEE items may contain hazardous substances that should not end up in the human environment and can have adverse effects on it if they do.

OXYGEN CONCENTRATION OVER ALTITUDE AND FLOW RATE

Oxygen Concentration Over Altitude Range 0-4000 m



SPECIFICATIONS

For all Models unless specified.

Device Electrical Classification: Class II, Type BF

Weight: Sport Model 3.9 lbs. (1.7 kg)/Pro Model 4.3 lbs. (1.9 kg)

Dimensions: 9.05" w x 7.875" h x 4.38" d (22.98 cm w x 20.00 cm h x 11.12 cm d)

Mode of Operation: Stationary/Portable

Flow Control Pulse Settings: 1, 2, & 3 LPMeq

Oxygen Concentration: 90% (+/- 3%)*

Oxygen Concentration Sensor Alarm: 85% or less

Maximum Outlet Pressure: 16 psi (110 kPa) (+/- 10%)

Average Sound Level At 2 LPMeq: 46 dB at 10 ft. (3 m)

Approximate Internal Battery Duration: See Battery Life Timetable on page 13

Approximate Internal Battery Recharge Time: Sport Model - 3 Hours/Pro Model - 4.5 hours

Power Supply: AC 100 to 240 VAC, 50 to 60 Hz; DC 11 to 16 VDC or Battery 12 to16.8 VDC

LifeChoice Activox POC Input: 19VDC, 6A

External AC Power Adapter/Charger Input: 100-240VAC, 50 - 60 Hz; Output: 19VAC, 6.3A

External DC Power Adapter/Charger Input: 11-16VDC, 10A; Output: 19VAC, 6.3A

Nasal Cannula: 7 ft. (2 m) maximum

Environmental Conditions for Use, Storage and Transport

Operational Temperature Range: 41°F to 104°F (5°C to 40°C)

Operational Humidity Range: 15% to 93%, Non-condensing

Storage Temperature Range: 32°F to 140°F (0°C to 60°C)

Storage Humidity Range: 15% to 93%, Non-condensing

Operational Altitude Max: 10,000 ft. (3,048 m) or 10.1 PSIA (522 mmHg)†

* When powered by the external AC adapter, external DC adapter, or external or internal battery.

† Performance degradation may occur at high altitude.

ACCESSORIES (ADDITIONAL/REPLACEMENT/SPARE)

4-Way Carry Case
Comes complete with adjustable strap system that allows case to be used as a backpack, shoulder strap, waist strap or carried as a briefcase. Included with purchase of LifeChoice Activox POC.
Product Number: XYC105B

AC Adapter/Charger*
10 ft. (3 m). Used to charge and run the POC simultaneously. Included with purchase of LifeChoice Activox POC.
Product Number: XYC103

DC Adapter/Charger*
6 ft. (1.8 m). Used to charge and run the POC simultaneously. For use at home or in the car, RV, motor boat, etc. Included with purchase of LifeChoice Activox POC.
Product Number: XYC104

Standard 7 ft. (2 m) Long Single Lumen Nasal Cannula†
Included with purchase of LifeChoice Activox POC.
Product Number: XYC262

Accessory Bag
Included with purchase of LifeChoice Activox POC.
Product Number: XYC340

External Battery
Not included with purchase of LifeChoice Activox POC Standard Package.
Product Number: 200122

*Accessories, adapters, and cables other than those specified, with the exception of adapters and cables sold by the manufacturer of the medical electrical equipment as replacement parts for internal components, may result in increased emissions or decreased immunity of the Model XYC100B/XYC100B-SPT/XYC100B-PRO.

† Nasal cannula may not be included. Based on local international requirements.

LIMITED WARRANTY AND DISCLAIMER
("Limited Warranty")

NOTE: This Limited Warranty provides specific legal rights. The Purchaser may also have other rights which vary from state to state or country to country and in some cases, due to applicable laws, certain limitations or exclusions of this Limited Warranty may not apply.

Inova Labs, Inc. ("Inova Labs") warrants solely to the first purchaser from Inova Labs or its authorized distributor ("Purchaser") that each new portable unit (or any combination thereof) excluding the Sieve Bed, Accessories, and Batteries (such new units excluding the Sieve Bed, Accessories, and Batteries hereinafter referred to as "Product") shall be free from defects of design, materials, and workmanship under normal use, operation and service for three (3) years from the date of purchase (meaning the date of purchase as evidenced by the sales receipt from Inova Labs or its authorized distributor, hereafter referred to as the "Date of Purchase"). The Sieve Bed is warranted to Purchaser be free of defects of design, materials, and workmanship under normal use, operation and service, for one (1) year from the Date of Purchase for Sieve Beds on portable oxygen concentrators ("POC"). Accessories and Batteries are warranted to Purchaser solely to be free of defects, for one (1) year from the Date of Purchase for Accessories and Batteries. Refer to the table below for a detailed description of the relevant timeframes under this Limited Warranty. Product components (which include the Outer Shell, Control Panel, Compressors, Computer Controller & Power Boards, and PSA Lung Assembly), Sieve Beds, Accessories, and Batteries are collectively referred to as "Items."

ITEM	LENGTH OF COVERAGE
Outer Shell (POC Housing)	3 Years
Control Panel (POC Keypad)	3 Years
Compressors	3 Years
Computer Controller & Power Boards	3 Years
PSA Lung Assembly	3 Years
Sieve Bed	1 Year
Battery – Internal	1 Year
Battery – External/Supplemental	1 Year
Accessories	1 Year

The Limited Warranty extends only to the Purchaser and is not transferable unless otherwise expressly agreed to in writing by Inova Labs.

Inova Labs' oxygen concentrators produce enriched oxygen gas which accelerates combustion. DO NOT ALLOW SMOKING OR OPEN FLAMES within ten (10) feet (three (3) meters) of these devices while in use. A user's SMOKING of any kind (including cigarette, cigar, and pipe) while using Product, and evidence that a user has smoked while using the Product, will void all warranties with respect to that Product and related Items.

An extended warranty on the Product is available at a maximum of two (2) additional years and must be purchased at the time of the original Date of Purchase. An extended warranty on the Product covers the same Product components as the limited three (3) year warranty (refer to chart above), and is added on to the original warranty which runs from the Date of Purchase. The timeframe for Sieve Bed replacement remains at one (1) year for POCs while Batteries and Accessories remain at one (1) year. Extended warranties are offered to the original Purchaser only and are non-transferrable unless otherwise expressly agreed to in writing by Inova Labs.

The Limited Warranty excludes from coverage any damage, failure, or malfunction caused by or related to:

a. Abuse, misuse, negligence or accident;
b. Failure to comply with instructions contained in the Operator's Manual;
c. Alteration, tampering, or modification by someone other than an authorized Inova Labs representative;
d. Unauthorized repairs or alterations;
e. Environmental conditions (including but not limited to water, flame, chemicals, fumes in the Atmosphere, extreme heat or cold, food or liquid, sand, dirt or the like);
f. Lack of regular, preventive maintenance and cleaning;
g. Damage in shipment to Inova Labs;
h. Other acts beyond the reasonable control of Inova Labs; and
i. Any damage caused by improper packaging when returning Items to Inova Labs.

Warranty Service and Coverage

PURCHASER'S EXCLUSIVE REMEDY AND INOVA LABS' SOLE OBLIGATION HEREUNDER SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE ITEM OR REFUND OF THE APPLICABLE PURCHASE PRICE, AT INOVA LABS' OPTION.

Inova Lab's warranty obligations hereunder are conditioned upon Purchaser's compliance with the warranty procedures set forth herein. If an Item fails

to conform to the Limited Warranty set forth herein, Purchaser must give prompt written notice to Inova Labs (with such notice in no event beyond the applicable warranty period), at which time Inova Labs or its authorized distributor will issue a Return Material Authorization ("RMA") number. All Items claimed to be defective within the warranty period shall be properly packaged and shipped on a prepaid basis to Inova Labs (USA sales) or its authorized distributor at Purchaser's expense. The exterior of the shipping container must clearly display the RMA number which properly identifies returned Items and the Item must be packaged together with proof of Date of Purchase. Items returned without a proper RMA number and proof of the Date of Purchase shall be refused and returned to Purchaser at Purchaser's expense. All returned Items are subject to warranty confirmation by Inova Labs. Inova Labs shall pay for standard shipment back to Purchaser for repair or replacement of Items properly covered under this Limited Warranty.

When repairing or replacing the Item, Inova Labs may use functionally equivalent products or parts that are new, equivalent to new or refurbished. All parts removed in the replacement of any Item shall become the property of Inova Labs.

To the full extent permitted under applicable law, the warranty coverage will not be extended or renewed or otherwise affected due to Inova Labs' authorized repair or replacement. However, part(s) repaired or replacement Items will be warranted for the unexpired portion of the original Limited Warranty.

Disclaimer of Warranties.

NO REPRESENTATIVE OF INOVA LABS HAS AUTHORITY TO MAKE ANY REPRESENTATIONS OR PROMISES EXCEPT AS EXPRESSLY STATED HEREIN. NO AGREEMENT VARYING OR EXTENDING THIS LIMITED WARRANTY SHALL BE BINDING UPON INOVA LABS UNLESS IN WRITING, SIGNED BY A DULY AUTHORIZED REPRESENTATIVE OF INOVA LABS. THIS LIMITED WARRANTY IS EXCLUSIVE AND GIVEN AND ACCEPTED IN LIEU OF ANY AND ALL OTHER WARRANTIES, AND TO THE FULLEST EXTENT PERMITTED UNDER APPLICABLE LAW INOVA LABS EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

Limitation of Liability.

TO THE FULLEST EXTENT PERMITTED UNDER APPLICABLE LAW, IN NO EVENT SHALL INOVA LABS HAVE ANY LIABILITY FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT, EXEMPLARY OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOSS OF USE AND LOST REVENUE, REGARDLESS OF THE

FORM OF THE CLAIM, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, ARISING OUT OF OR RELATING TO INOVA LABS' ITEMS, MATERIALS AND/OR SERVICES, AND EVEN IF INOVA LABS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, INOVA LABS' LIABILITY HEREUNDER OR RELATING HERETO SHALL NOT EXCEED THE PURCHASE PRICE PAID FOR THE ITEMS, REGARDLESS OF THE FORUM AND REGARDLESS OF WHETHER ANY ACTION OR CLAIM IS BASED ON CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. PURCHASER AGREES AND ACKNOWLEDGES THAT THE ITEMS ARE OF A SIZE, DESIGN AND CAPACITY SELECTED BY ITS MEDICAL PROVIDER.

Basis of Bargain

PURCHASER ACCEPTS THESE DISCLAIMERS OF WARRANTIES AND LIMITATIONS OF LIABILITY CONTAINED HEREIN AS PART OF A BARGAIN WITH RESPECT TO THE PRICING OF THE ITEMS AND UNDERSTANDS THAT THE PRICING WOULD LIKELY BE HIGHER IF INOVA LABS WERE REQUIRED TO BEAR LIABILITY IN EXCESS OF THAT STATED HEREIN. ALL OF THE LIMITATIONS AND DISCLAIMERS SET FORTH HEREIN SHALL APPLY NOTWITHSTANDING THE FAILURE OF THE ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

Governing Law and Jurisdiction

The rights and obligations of the parties pursuant to this Limited Warranty and any dispute arising hereunder shall be governed by and interpreted in accordance with the internal (but not the conflicts) laws of the State of Texas, USA. The 1980 U.N. Convention on Contracts for the International Sale of Goods shall not apply. If any provision of this Limited Warranty is inconsistent with applicable laws relating to Purchaser, Purchaser agrees to waive any and all rights and remedies it may have under such laws to the extent it may waive such rights and remedies. This Limited Warranty is offered as an additional benefit to Purchaser's statutory rights and it does not affect such statutory rights in any way. The parties agree and consent that the state or federal courts in Texas shall have exclusive jurisdiction with respect to any dispute arising out of or relating to this Limited Warranty. If any provision of this Limited Warranty is held to be illegal or unenforceable, that provision will be limited or eliminated to the minimum extent necessary so that this Limited Warranty will otherwise remain in full force and effect and enforceable. EACH PARTY EXPRESSLY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

Technical Support

Inova Labs' Customer Care Team can be reached Monday-Friday, 8:00AM-5:00PM CST at 1.512.617.1700.

EMC INFORMATION

Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the accompanying tables.

Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The LifeChoice® Activox Portable Oxygen Concentrator Model XYC100B-SPT/XYC100B-PRO is intended for use in the electromagnetic environment specified below. The customer or the user of the Model XYC100B-SPT/XYC100B-PRO should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	+/-6 kV contact +/-8 kV air	+/-6 kV contact +/-8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient/Burst IEC 61000-4-4	+/-2 kV for power supply lines +/-1kV for input/ output lines	+/-2 kV for power supply lines Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	+/-1 kV line-to-line +/-2 kV line-to-earth	+/-1 kV line-to-line +/-2 kV line-to-earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles < 5% U_T (>95% dip in U_T) for 5 seconds	< 5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles < 5% U_T (>95% dip in U_T) for 5 seconds	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Model XYC100B-SPT/ XYC100B-PRO requires continued operation during power mains interruptions, it is recommended that the Model XYC100B-SPT/ XYC100B-PRO be powered from an uninterruptible power supply or a battery.
Power Frequency (50/60Hz) Magnetic Field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical commercial or hospital environment.

NOTE: U_T is the a.c. mains voltage prior to application of the test level.

Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The LifeChoice® Activox Portable Oxygen Concentrator Model XYC100B-SPT/XYC100B-PRO is intended for use in the electromagnetic environment specified below. The customer or the user of the Model XYC100B-SPT/XYC100B-PRO should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
			Portable and Mobile RF communications equipment should be used no closer to any part of the Model XYC100B-SPT/XYC100B-PRO, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. **Recommended Separation Distance**
Conducted RF IEC 61000-4-6	3 Vrms 150kHz-80MHz	3 V	$d = 1.17 \sqrt{P}$ $d = 1.17 \sqrt{P}$, 80MHz to 800MHz
Radiated RF IEC 61000-4-3	3 V/m 80MHz-2.5GHz	3 V/m	$d = 2.33 \sqrt{P}$, 800MHz to 2.5GHz

Where 'P' is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and 'd' is the recommended separation distance in meters (m).

Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b]

Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1: At 80MHz and 800MHz, the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Model XYC100B-SPT/XYC100B-PRO is to be used exceeds the applicable RF compliance level above, the Model XYC100B-SPT/XYC100B-PRO should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Model XYC100B-SPT/XYC100B-PRO.

b Over the frequency range 150kHz to 80MHz, field strengths should be less than 3 V/m.

Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and The LifeChoice® Activox Portable Oxygen Concentrator Model XYC100B-SPT/XYC100B-PRO

The LifeChoice® Activox Portable Oxygen Concentrator Model XYC100B-SPT/XYC100B-PRO is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Model XYC100B-SPT/XYC100B-PRO can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Model XYC100B-SPT/XYC100B-PRO as recommended below, according to the maximum output power of the communications equipment.

Separation Distance According to the Frequency of Transmitter (m)

Rated Maximum Output Power of Transmitter (W)	150kHz to 80MHz $d=1.17\sqrt{P}$	80MHz to 800MHz $d=1.17\sqrt{P}$	800MHz to 2.5GHz $d=2.33\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.2	1.2	2.3
10	3.7	3.7	7.4
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance 'd' in meters can be estimated using the equation applicable to the frequency of the transmitter, where 'P' is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Guidance and Manufacturer's Declaration - Electromagnetic Emissions

The LifeChoice® Activox Portable Oxygen Concentrator Model XYC100B-SPT/XYC100B-PRO is intended for use in the electromagnetic environment specified below. The customer or the user of the Model XYC100B-SPT/XYC100B-PRO should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment - Guidance
RF Emissions, CISPR 11	Group 1	The Model XYC100B-SPT/XYC100B-PRO uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference to nearby electronic equipment.
RF Emissions, CISPR 11	Class B	The Model XYC100B-SPT/XYC100B-PRO is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions, IEC 61000-3-2	Class A	
Voltage Fluctuations/Flicker Emissions, IEC 61000-3-3	Complies	

OWNER'S NOTES

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